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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,153	08/19/2005	Hiroyuki Sakamoto	27604-00003US1	2814

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EXAMINER	
TAI, XIUYU	
ART UNIT	PAPER NUMBER
1795	
MAIL DATE	DELIVERY MODE
03/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/528,153	SAKAMOTO ET AL.	
	Examiner	Art Unit	
	Xiuyu Tai	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12-15 and 17-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12-15 and 17-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Due to applicant's amendment, rejections under 35 U.S.C. 112, second paragraph to claims 2, 17, 18, and 20 are withdrawn.

2. Applicant's arguments filed 10/30/2008 have been fully considered but they are not persuasive.

3. In response to the arguments that a coating composition is not suitable for an adhesive composition, Kadokura discloses an electroconductive adhesive member and a method of make the same. The electroconductive adhesive member of Kadokura is formed by electrodeposition coating in cationic/anionic resin electrodepositoin pains (col. 6, line 29-54). Therefore, the cationic resin electrodepostion coating composition of Kawakami can be used as an adhesive composition for electrodeposition process.

4. With respect to the arguments that (1) the claimed adhesive layer exhibits strong adhesiveness between a conductive material and the adhesive layer and (2) the adhesion position is not shifted from one to another, they are not present in claims.

Terminal Disclaimer

5. The terminal disclaimer filed on 1/30/2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application No. 10/528,154 has been reviewed and is accepted. The terminal disclaimer has been recorded.

6. The terminal disclaimer is accepted and the double patenting rejections to claims 1-11 are withdrawn.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 1-10, 12-15, and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadokura (U.S. 5,676,812) in view of Kawakami et al (U.S. 6,106,684).

11. Regarding claim 1, Kadokura discloses an electroconductive adhesive member and a method of make the same. The adhesive member 1 is attached to the inner surface of an outer cover 11 by forming adhesive resin layer 4 on a thin metallic film layer 3 (copper film, i.e. conductive material) by electrodeposition coating (Figure 1; col. 3, line 35-43; example 1-1, col. 9, line 48-67). The adhesive resin layer 4 is bonded to the adherent member by curing by heating (col. 7, line 46-48; col. 10, line 1-5).

Kadokura fails to teach the adhesive composition comprising a hydratable function group and unsaturated bond containing cationic resin composition. However, Kawakami et la disclose a cationic electrodeposition coating process and composition. Kawakami teaches a water-based cationic electrodeposition coating composition (col. 3, line 31-32). The cationic electrodeposition coating composition of Kawakami contains a component having a hydratable function group, such as sulfonium (col. 5, line 11-17). Kawakami indicates that the ionic group in the hydratable function group is capable of ion releasing upon voltage application (col. 5, line 12-15) and can be irreversibly rendered non-conductive due to the electrolytic reduction reaction (col. 5, line 19-21). Kawakami further teaches that when the cationic electrodeposition coating composition contains a component having an unsaturated bond, a further improved throwing power can be obtained (col. 5, line 60-63). Therefore, it would be obvious for one having ordinary skill in the art to utilize the cationic electrodepositon coating composition comprising a hydratable function group and an unsaturated bond as suggested by Kawakami in lieu of the electrodeposition composition of Kadokura in order to enhance coating quality and efficiency while using the coating method of Kadokura.

12. Regarding claim 2, Kawakami teaches a water-based coating composition (col. 3, line 31-32); hence no volatile material would be produced when the coating product was subjected to heating process, reads on the instant claim.

13. Regarding claims 3 and 17, the cationic coating composition of Kawakami is used in electrodeposition coating process, including a step of applying voltage to activate electrochemical reaction (col. 3, line 28-30), reads on the instant claims.

14. Regarding claims 4, 18, and 19, the hydratable function group of Kawakami is sulfonium (col. 5, line 11-17), reads on the instant claims.

15. Regarding claims 5 and 20, the unsaturated bond of Kawakami may be a triple-bond containing compound such as propargyl alcohol (col. 7, line 10-15), reads on the instant claims.

16. Regarding claims 6 and 7, the amount of sulfonium of Kawakami is in the range of 10-300 mmol/100g of the resin solid (col. 5, line 44-45) and the content of unsaturated bond is preferably 50-2000 mmol/100g of the resin solids (col. 6, line 10-12), which are within the claimed ranges.

17. Regarding claim 8, the cationic coating composition of Kawakami contains polyepoxide resin skeleton (col. 6, line 23-29), reads on the instant claim.

18. Regarding claim 9, the polyepoxide of Kawakami includes novolak phenol type polyepoxy resins and/or cresol type polyepoxy resins (col. 6, line 30, 32-33) and the average molecular weight of resin is in the range of 250- 20,000, more preferably 500-500 (col. 6, line 36-38), reads on the instant claim.

19. Regarding claim 10, Kadokura teaches a step of drying the obtained electroconductive adhesive member1 at 50C, but before attaching it to the etched resin substrate (example 1; col. 9, line 55-67), reads on the instant claim.

20. Regarding claim 12, Kadokura also teaches eletroconductive adhesive resin layers 4 are formed on both sides of a metallic substrate 5 (Figure 2; col. 3, line 46-48) wherein the adhesive resin layers 4 are the adhered surface, reads on the instant claim.

21. Regarding claim 13, Kadokura also teaches eletroconductive adhesive resin layers 4 are formed on both sides of a metallic substrate 5 (Figure 2; col. 3, line 46-48) wherein the metallic substrate 5 is the adhesion target and the adhesive resin layers 4 are the adhered surface, reads on the instant claim.

22. Regarding claim 14, the thin metallic film layer 3 of Kadokura is a thin copper film (col. 3, line 39-40), reads on the instant claim.

23. Regarding claim 15, it is a product (laminate)-by-process (the method of claim1) claim. Because of the nature of product-by-process claims the Examiner cannot ordinarily focus on the precise difference between the claimed product and the disclosed product. It is then Applicants' burden to prove that an unobvious difference exists. See In re Marosi, 218 USPQ 289,292-293 (CAFC 1983). Furthermore, it is noted that this claim contains product-by-process language. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).*

24. Regarding claim 21, the composition to make the adhesive resin layer using the method of Kadokura/Kawakami comprises a base resin (col. 6, line 24-25 of Kawakami), a component having a hydratable functional group (col. 5, line 15-17 of Kawakami), and a component having a unsaturated bond (col. 5, line 65-67 of Kawakami). The resulting resin layer has sufficient film potential (i.e. electric resistance; col. 3, line 64-67), reads on the instant claim.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuyu Tai whose telephone number is 571-270-1855. The examiner can normally be reached on Monday - Friday, 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/X. T./
Examiner, Art Unit 1795

1/29/2009

/Alexa D. Neckel/
Supervisory Patent Examiner, Art Unit 1795